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support of this assertion, Applicants are enclosing herewith the Patent Assignment Abstract of the Jordan et al. reference, indicating an assignment to Kimberly-Clark, along with the Notice of Recordation and Assignment for the instant application indicating the assignment to Kimberly-Clark. Applicants respectfully request reconsideration and allowance of all pending claims.

1. Rejection of Claims 1-16, 18, 21, 23-39, 41, 44, 46-62, 64, 67, 69-85, 87, 90, and 92 Under 35 U.S.C. §103(a)

Reconsideration is requested of the rejection of claims 1-16, 18, 21, 23-39, 41, 44, 46-62, 64, 67, 69-85, 87, 90, and 92 under 35 U.S.C. §103(a) as being unpatentable over Zhou et al. (U.S. 6,774,069) or Zhou et al. (U.S. Application No. 2002/0123538) in view of Wang et al. (U.S. 4,713,068) or Jackson et al. (U.S. 6,835,678) or Franklin et al. (U.S. 6,890,630) or Shah et al. (U.S. 5,536,563).\*

Claim 1 is directed to an article comprising an ultrasonically bonded laminated structure. The laminated structure comprises a first thermoplastic material selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon, and a second thermoplastic material selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon, and an adhesive composition. The adhesive

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\* Applicants note the Office's use of the word "anticipated" in paragraph 3 of the Office action with regards to the 35 U.S.C. §103(a) rejection. Applicants believe this was an error and that the correct rejection was under 35 U.S.C. §103(a) as being obvious over the cited references.

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composition comprises an atactic polymer and an isotactic polymer. The atactic polymer has a degree of crystallinity of less than about 20% and a number-average molecular weight of from about 1,000 to about 300,000. The isotactic polymer has a degree of crystallinity of at least about 40% and a number-average molecular weight of from about 3,000 to about 200,000. The first thermoplastic material and the second thermoplastic material are compatible thermoplastic materials and are ultrasonically bonded together.

Zhou et al. ('069) disclose hot-melt adhesive compositions of atactic polypropylene and isotactic polypropylene that are particularly suitable for bonding non-woven elastic strands to various non-woven substrates and one non-woven elastic laminate to another non-woven elastic laminate. Specifically, the adhesive composition comprises an atactic polypropylene having a degree of crystallinity of about 20% or less, a number-average molecular weight of from about 500 to about 40,000, and a molecular weight distribution index in the range of 2 to 10, and an isotactic polypropylene having a degree of crystallinity of about 40% or more, a number-average molecular weight of from about 3,000 to about 150,000, and a molecular weight distribution index in a range of 2 to 8.

Additionally, the '069 reference discloses elastic composite laminated structures employing the adhesive compositions. The laminated structures comprise a first layer and a second layer, which may comprise a variety of materials, including, non-woven materials and elastic components. Preferable materials include polyurethane, styrene-isoprene-styrene, styrene-butadiene-styrene, styrene-ethylene/propylene-

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styrene, or styrene/ethylene-co-butadiene/styrene. The adhesive composition can also be used to bond an elastomeric laminate such as a necked-bonded laminate (NBL) to a non-elastic substrate such as a spunbond-meltblown-spunbond (SMS) laminate.<sup>1</sup> Additionally, the adhesive composition can bond one non-woven elastomeric laminate to another non-woven elastomeric laminate. Examples of this include a NBL bonded to another NBL, or an NBL to a polypropylene spunbonded layer, or a stretch-bonded laminate (SBL)<sup>2</sup> to another SBL, or a SBL to a spunbonded layer, or a spunbonded layer to another spunbonded layer. Additionally, the '069 reference discloses that the resulting laminated materials may be passed through an ultrasonic bonding unit to form a seal or side seam.

Zhou et al. ('538) disclose adhesive compositions comprising selected ratios of crystalline and amorphous polymers. Specifically, one adhesive composition of the invention comprises an atactic polymer having a degree of crystallinity of about 20% or less and a number-average molecular weight of from about 1,000 to about 300,000, and an isotactic polymer having a degree of crystallinity of about 40% or more and a number-average molecular weight of from about

<sup>1</sup> As defined in '069, a necked-bonded laminate generally comprises a metallocene-catalyzed polyethylene layer sandwiched between two polypropylene, spunbonded layers. Column 7, lines 60-62. Additionally, a spunbond-meltblown-spunbond laminate generally comprises a plurality of meltblown fibers sandwiched between two polypropylene spunbonded layers. Column 8, lines 3-5.

<sup>2</sup> As defined in '069, a stretch-bonded laminate generally comprises an elongated elastic web or elastomeric strands bonded between two spunbond layers. Column 8, lines 16-19.

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3,000 to about 200,000.

Additionally, similar to the '069 reference, the '538 reference discloses laminated structures employing the adhesive compositions. The laminated structures comprise a first layer and a second layer, which may comprise a variety of materials, including, non-woven materials, film, woven materials, cellulosic material, thermoplastic material, elastic components, and combinations thereof. Example substrates bonded using the adhesive composition include: a necked-bonded laminate (NBL), a polypropylene, spunbonded layer, and an outercover comprising a polyethylene layer and a polypropylene, spunbonded layer. Additionally, the '538 reference discloses that the resulting laminated materials may be passed through an ultrasonic bonding unit to form a side seam or seal.

As recognized by the Office, the '069 and '538 references fail to specifically disclose a laminated structure comprising a first thermoplastic material and a second thermoplastic material that are compatible thermoplastic materials, ultrasonically bonded together with an adhesive composition, wherein the first thermoplastic material is selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon, and the second thermoplastic material is selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon. In an attempt to find each and every element of claim 1 as required by the M.P.E.P. for a determination of *prima facie* obviousness, the Office cites the Wang et al., Jackson et al., Franklin et al., and/or Shah et al. references for combination with '069 or '538.

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Wang et al. disclose a breathable clothlike barrier for use as an outer cover or baffle in such absorbent articles as disposable diapers, sanitary napkins, and incontinent pads. The breathable clothlike barrier comprises a controlled structure defensive composite comprising at least two layers. The layers must be joined to each other using any method known in the art.<sup>3</sup> The first layer is a clothlike porous substrate and the second layer, which is joined to a first side of the first layer, comprises a continuous film of polyvinyl alcohol. The material of the first layer is not known to be critical and can be any clothlike porous material as long as the requirements such as basis weight, fiber diameter, and pore size are met.<sup>4</sup> Examples of materials for use in the first layer include thermoplastic polymers, such as polyesters, polyamides, polyurethanes, polyolefins, combinations thereof, and the like.<sup>5</sup>

Jackson et al. disclose water dispersible fibrous fabrics or material compositions that comprise an ion-sensitive water-dispersible binder. The ion-sensitive water-dispersible binder can comprise a single triggerable polymer, such as an ion-sensitive polymer, or a combination of two or more different polymers, such as a triggerable polymer and a co-binder. Examples of ion-sensitive polymers for use in the ion-sensitive water-dispersible binder include Lion polymers (e.g., Lion acrylic acid terpolymers and sulfonate anion modified acrylic

<sup>3</sup> See Wang et al. at column 16, lines 43-50. Specifically, the layers can be joined using thermal bonding, chemical or adhesive bonding, solvent bonding, ultrasonic bonding, laser bonding, needle punching, hydraulic entanglement, and the like.

<sup>4</sup> See id. at column 9, lines 21-23 and column 10, lines 22-25.

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acid terpolymers) and ion-sensitive acrylic acid copolymers. Co-binder polymers include poly(ethylene-vinyl acetate), poly(styrene-butadiene), poly(styrene-acrylic), a vinyl acrylic terpolymer, neoprene, a polyester latex, an acrylic emulsion latex, poly vinyl chloride, ethylene-vinyl chloride copolymer, a carboxylated vinyl acetate latex, and the like. These ion-sensitive water-dispersible binders can be used on fabrics and materials made from natural fibers, synthetic fibers, and combinations thereof. Synthetic fibers can include those derived from polypropylenes, polyethylenes, polyolefins, polyesters, polyamides, polyacrylics, etc. Furthermore, the fabrics or materials may be formed from a single layer or multiple layers of fibers.

Franklin et al. disclose elastic components for use in disposable absorbent articles such as children's toilet training pants. The elastic components can be applied to any flexible substrate, or between two such substrates, to provide retractive or stretching forces to the substrate. In one embodiment, the elastic components can be applied between two substrates using a laminate adhesive. The substrates may be a film, woven fabric, knit fabric or non-woven fabric such as cotton, wool, polyester, nylon, polypropylene, polyethylene, or the like.

Shah et al. disclose a thermoplastic, elastomeric composition for use in disposable composite laminates. The thermoplastic, elastomeric composition comprises a block copolymer which comprises an elastomeric midblock portion and a thermoplastic endblock portion, a first tackifying resin

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<sup>5</sup> See id. at column 9, lines 42-47.

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substantially compatible with and substantially associated with the midblock portion, and a second tackifying resin substantially compatible with and substantially associated with the endblock portion. In one specific embodiment of Shah et al., a disposable absorbent product comprises a liquid-permeable topsheet, a backsheet attached to the liquid-permeable topsheet, an absorbent structure positioned between the topsheet and the backsheet, and a nonwoven sheet positioned between the topsheet and the backsheet. The nonwoven sheet is prepared from the thermoplastic, elastomeric composition. Exemplary of materials for use as the topsheet and backsheet are liquid-permeable materials, such as spunbonded polypropylene or polyethylene. Exemplary of materials for use as the backsheet are liquid-impervious materials, such as polyolefin films.

In order for the Office to show a *prima facie* case of obviousness, M.P.E.P. §2143 requires that the Office must meet three criteria: (1) the prior art references must teach or suggest all of the claim limitations; (2) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the references, and (3) there must be some reasonable expectation of success. The Office has failed to meet its burden under numbers (1) and/or (2) above, as the cited references fail to show each and every limitation of Applicants' invention and there is no motivation or suggestion to combine the references to arrive at each and every limitation.

The '069 and '538 references teach that laminate structures can be made using their adhesive compositions to bind a first

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layer and second layer; and even provides several commercially acceptable materials for use in the first and second layers of the laminate structures. As noted above, however, '069 and '538 fail to disclose an ultrasonically bonded laminated substrate comprising a first thermoplastic material and a second thermoplastic material that are compatible thermoplastic materials, wherein the first thermoplastic material is selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon, and the second thermoplastic material is selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon.

The other cited references fail to overcome the above shortcomings. Specifically, nowhere in any of the cited references is a laminated substrate comprising a first thermoplastic material ultrasonically bonded with an adhesive composition to a second thermoplastic material, wherein the first thermoplastic material and the second thermoplastic material are compatible thermoplastic materials, and wherein the first thermoplastic material is selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon, and the second thermoplastic material is selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon suggested or disclosed. While these references disclose using materials including: polyethylene, polyester, polylactic acid, and nylon in their layers or substrates,<sup>6</sup> no

<sup>6</sup> See e.g., Wang et al. at column 9, lines 21-23, column 10, lines 22-25, and column 11, lines 62-66 (disclosing that the first layer is a clothlike porous substrate such as a fibrous nonwoven web made of polyesters, polyamides, polyurethanes,

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where is there specifically disclosed or suggested to ultrasonically bond compatible first and second thermoplastic materials, each being independently selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon. Furthermore, no Examples in any of the cited references disclose a first thermoplastic material and a second thermoplastic material being compatible and each being independently selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon.

Furthermore, the cited references fail to provide a reason why one skilled in the art would choose different materials for the first and second layers of the laminates over those provided in the '069 or '538 references. Specifically, no where is there motivation or suggestion to use a first and second layer that are compatible and are selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon. By contrast, the only laminated substrates disclosed in the '069

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polyolefins, and combinations thereof, while the second layer is a nonporous film of poly(vinyl alcohol)); Jackson et al. at column 22, lines 29-41 (disclosing that the fibers for forming the water dispersible fibrous fabrics can include synthetic fibers, such as those derived from polypropylenes, polyethylenes, polyolefins, polyesters, polyamides, polyacrylics, etc.); Franklin et al. at column 11, lines 6-9 (disclosing films, woven fabrics, knit fabrics, or non-woven fabrics such as cotton, wool, polyester, nylon, polypropylene, polyethylene, or the like for use as the substrates of the disposable absorbent articles); and Shah et al. at column 11, lines 10-18 (disclosing that materials suitable for use as the topsheet and backsheet of the disposable absorbent product include liquid permeable materials, such as spunbonded polypropylene or polyethylene and liquid-impervious materials, such as polyolefin films).

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and '538 references are made by bonding a polypropylene layer to a polypropylene layer as in the NBL bonded to another NBL, or an NBL bonded to a SMS laminate, or an NBL bonded to a polypropylene spunbonded layer, or an elastomeric component to a spunbonded layer.<sup>7</sup>

The Office asserts that while '069 and '538 do not teach the instantly claimed substrate materials, polyethylene, polyester, and polyamides including nylon are known functionally equivalent thermoplastics to polypropylene, specifically in terms of their use as substrate materials in disposable absorbent articles as taught by Wang et al., Jackson et al., Franklin et al., and/or Shah et al. As such, the Office asserts that one having ordinary skill in the art at the time of the invention would have been motivated to utilize the instantly claimed functionally equivalent thermoplastic substrate materials based on the desired end use of the laminated structure. Applicants respectfully disagree as there is no disclosure or suggestion in the cited references to substitute the instantly claimed substrate materials for the polypropylene substrates disclosed in either the '069 or '538 references. Nor is there any recognition of the benefit of doing so.

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<sup>7</sup> See '069 at Examples 1 and 3-4. Specifically, Example 1 uses laminates comprising a NBL bonded to a SBL or a NBL to a SMS. Examples 3-4 use laminates comprising an elastomeric component bonded to a polypropylene spunbonded layer. See also '538 at Examples 2 and 3-6. Specifically, Example 2 uses laminates comprising a NBL bonded to a NBL. Example 3 uses laminates comprising two polypropylene, spunbonded substrates together. Examples 4-5 use laminates comprising a NBL bonded to an outcover material. Example 6 uses laminates comprising a NBL bonded to a SBL.

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As noted above, in order for the Office to show a *prima facie* case of obviousness, there must be some suggestion or motivation to combine the reference teachings. The teaching or suggestion to make the combination must be found in the prior art, not in Applicants' disclosure. Additionally, as noted in M.P.E.P. §2143.01, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.

Undoubtedly, the cited references disclose materials selected from polyethylene, polyester, and nylon for use in substrates of disposable absorbent articles. Furthermore, '069 and '538 disclose laminated structures comprising a first layer bonded to a second layer, wherein both the first layer and the second layer are polypropylene. Applicants assert, however, there is no reason one skilled in the art would combine these teachings without using Applicants' disclosure as a blueprint. Specifically, why would one skilled in the art have been motivated to choose the instantly claimed substrate materials for the first thermoplastic material and the second thermoplastic material, when '069 and '538 disclose laminated substrates using polypropylene bonded to polypropylene, over many various other substrate materials commonly known in the thermoplastic substrate art? They would not as there is simply no motivation or suggestion to do so. All of the cited references alone or in combination fail to recognize that ultrasonic bonding of compatible (i.e., materials have melting temperatures that do not vary by more than 40°C and have similar molecular structure to allow for no macroseparation upon

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ultrasonic bonding) materials can be accomplished when the specific adhesive is used.

With all due respect, it appears that the Office has used impermissible hindsight analysis and reconstruction when combining the Wang et al., Jackson et al., Franklin et al., and/or Shah et al. references with the '069 or '538 reference. Notably, it would be clear to one skilled in the art reading either '069 or '538 that thermoplastic polymers can be bonded with the adhesive compositions to make the laminated substrates described herein. There are, however, a myriad of thermoplastic polymers, many of which are used in laminated substrates. What is important is that there is no motivation or suggestion to use a compatible first thermoplastic material and a second thermoplastic material each being independently selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon over any of the other numerous of thermoplastic materials described in the art.

Additionally, it is well settled that the burden is on the Office to provide some suggestion of the desirability to do what the inventor has done; that is, the Office must present a convincing line of reasoning as to why the artisan would have found the claimed invention to be obvious in light of the teachings of the references. Applicants respectfully submit that the Office has not presented any reasons why the six references should be combined, let alone a convincing line of reasoning as required by the MPEP.<sup>8</sup>

<sup>8</sup> Applicants respectfully point out that the Office does repeatedly state throughout the Office action how the invention differs from the cited references and what one skilled in the

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The Office has stated that clearly one skilled in the art would have assumed that the instantly claimed thermoplastic materials could have been substituted for polypropylene as disclosed in both the '069 and '538 references. The Office fails, however, to provide any reasoning as to why one skilled in the art would make the substitution as set forth in claim 1; that is, to produce a laminated structure comprising a first thermoplastic material ultrasonically bonded with an adhesive composition to a second thermoplastic material, wherein the first thermoplastic material and the second thermoplastic material are compatible thermoplastic materials, and wherein the first thermoplastic material is selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon; and the second thermoplastic material is selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon. A statement as to what was done by the artisan cannot be construed as a statement regarding motivation.

There is simply no motivation to combine '069 or '538 with Wang et al., Jackson et al., Franklin et al., and/or Shah et al. to arrive at claim 1. As such, claim 1 cannot be said to be obvious in view of the cited references. Furthermore, claims 2-16, 18, 21, and 23, which depend on claim 1, cannot be said to be obvious in view of the cited references for the same reasons

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art would have assumed based on the teachings of the references. There is, however, no reasoning set forth in the Office action as to why the references would be combined. Applicants respectfully submit that mere comment that each of the six cited references disclose the various thermoplastic materials in substrates is not tantamount to a convincing line of reasoning for why the references could be combined.

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as claim 1 set forth above as well as for the additional elements they require.

Claim 24 is similar to claim 1 and is further directed to the process for manufacturing the article comprising an ultrasonically bonded laminated structure. Specifically, the process comprises providing a first thermoplastic substrate comprising an adhesive composition; providing a second thermoplastic substrate; and ultrasonically bonding the first thermoplastic substrate to the second thermoplastic substrate. As in claim 1, the first thermoplastic substrate is selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon and the second thermoplastic substrate is selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon. As such, claim 24 is patentable over the cited references for the same reasons as claim 1 set forth above, as well as for the additional elements it requires.

Claims 25-39, 41, 44, and 46 depend directly or indirectly on claim 24. As such, claims 25-39, 41, 44, and 46 are patentable over the cited references for the same reasons as claim 24 set forth above, as well as for the additional elements they require.

Claim 47 is similar to claim 24 and further requires introducing the adhesive composition onto the first or the second thermoplastic substrate and contacting the first and second substrate together to form an adhesive bond therebetween. As such, claim 47 is patentable over the cited references for the same reasons as claim 24 set forth above, as well as for the additional elements it requires.

Claims 48-62, 64, 67, and 69 depend directly or indirectly

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on claim 47. As such, claims 48-62, 64, 67, and 69 are patentable over the cited references for the same reasons as claim 47 set forth above, as well as for the additional elements they require.

Claim 70 is similar to claim 1 and further requires the adhesive composition to have an open time of less than about 10 minutes. As such, claim 70 is patentable over the cited references for the same reasons as claim 1 set forth above, as well as for the additional elements it requires.

Claims 71-85, 87, 90, and 92 depend directly or indirectly from claim 70. As such, claims 71-85, 87, 90, and 92 are patentable for the same reasons as claim 70 set forth above, as well as for the additional elements they require.

2. Rejection of Claims 20, 43, 66, and 89 Under 35 U.S.C. §103(a)

Reconsideration is requested of the rejection of claims 20, 43, 66, and 89 Under 35 U.S.C. §103(a) as being unpatentable over Zhou et al. (U.S. 6,774,069) or Zhou et al. (U.S. Application No. 2002/0123538A1) in view of Rearick et al. (U.S. Application No. 2002/0064639) or Jordan et al. (U.S. Application No. 2004/0127123).

It is respectfully submitted that the Jordan et al. publication is not prior art against this pending application under 35 U.S.C. §103(a). The Jordan et al. reference cited by the Office has a priority date of December 10, 2003 based on its

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35 U.S.C. §102(e)(1) application date.<sup>9</sup> However, as stated in 35 U.S.C. §103(c), prior art which qualifies only under subsection (e) of section 102 does not preclude patentability where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. The Jordan et al. reference has been assigned to Kimberly-Clark Worldwide, Inc. Furthermore, the instant application has also been assigned to Kimberly-Clark Worldwide, Inc. As evidence of these assignments, enclosed herewith is the following: (1) Patent Assignment Abstract from the Patent And Trademark Office website for the Jordan et al. reference, which sets forth that all inventors of this reference have assigned their rights to Kimberly-Clark Worldwide, Inc.; and (2) the Notice of Recordation of Assignment Document and Assignment for the instant application indicating that all inventors have assigned their rights to Kimberly-Clark. As such, Applicants assert that Jordan et al. cannot be a proper basis of rejection of the claims of the present application as Jordan et al. cannot be considered as prior art.

Claims 20, 43, 66, and 89 depend from claims 1, 24, 47, and 70, respectfully, which are discussed above. Claims 1, 24, 47, and 70 are patentable for the reasons set forth above. In particular, the '069 and '538 references fail to disclose a first thermoplastic material and a second thermoplastic material

<sup>9</sup> 35 U.S.C. §102(e)(1) applies to an invention described in "an application for patent, published under §122(b) by another filed in the United States before the invention by the applicant for patent...."

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that are compatible thermoplastic materials, wherein the first thermoplastic material is selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon, and the second thermoplastic material is selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon. Furthermore, there is no motivation to modify the '069 and/or '538 references to arrive at each and every limitation of claim 1 (or any of the other independent claims).

In the Office action dated January 26, 2006, the Office recognizes that the '069 and '538 references do not teach the use of polylactic acid as the substrate material as required in dependent claims 20, 43, 66, and 89. The Office asserts, however, that polylactic acid is a known substitute for polypropylene in disposable absorbent articles as taught by Rearick et al. As such, one having ordinary skill in the art at the time of the invention would have been motivated to utilize polylactic acid as the substrate material in the disposable absorbent articles of '069 or '538. Applicants respectfully disagree as no where in the Rearick et al. is it disclosed or suggested to use a first thermoplastic material selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon, and a second thermoplastic material is selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon, wherein the first thermoplastic material and the second thermoplastic material are compatible thermoplastic materials and are ultrasonically bonded together to produce their cellulosic substrates.

Specifically, the Rearick et al. reference is directed to cellulosic substrates with reduced absorbent capacity having the

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capability to wick liquids. The cellulosic substrates have an inside and an outside connected to the inside. The inside comprises cellulosic fibers that have been chemically treated to be hydrophobic and therefore have a reduced absorbent capacity. The outside comprises untreated cellulosic fibers. As defined in Rearick et al., "cellulosic substrate" can include non-cellulosic fibers including a polyolefin such as polypropylene or polyethylene, polyester, nylon, polyvinyl, polyurethane, acetate, mineral fibers, silk, wool, polylactic acid, or polytrimethyl terephthalate, and mixtures thereof.

While, as noted above, Rearick et al. disclose that their cellulosic substrates can include polylactic acid in a laundry list of synthetic fibers, which also includes, for example, polypropylene, polyethylene, polyester, nylon, polyvinyl, polyurethane, acetate, mineral fibers, silk, wool, and the like<sup>10</sup>, nowhere is it disclosed or suggested that a laminated substrate comprising a first thermoplastic material selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon, and a second thermoplastic material is selected from the group consisting of polyethylene, polyester, polylactic acid, and nylon, wherein the first thermoplastic material and the second thermoplastic material are compatible thermoplastic materials and are ultrasonically bonded together. Furthermore, nowhere is it suggested or disclosed in the Rearick et al. reference to choose polylactic acid over any of the other numerous synthetic fibers for use in the cellulosic substrates. Specifically, in Example 4 of Rearick et al. (which is the only

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<sup>10</sup> See Rearick et al. at page 3, paragraph 29.

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Example using a synthetic fiber), polyester is the synthetic fiber used in their cellulosic substrates. Additionally, as noted on page 16, paragraph 195, polypropylene, nylon, and polyester are the domineering synthetic fibers for the athletic wear market, which is the market the Rearick et al. cellulosic substrates are targeted for.

As such, the Office has not presented a convincing line of reasoning as to why one skilled in the art would be motivated to use the polylactic acid fibers of Rearick et al. over any other thermoplastic material in the laminated substrates of '069 or '538 references, specifically over polypropylene, which is specifically used in the Examples of both the '069 and '538 references, to arrive at each and every limitation of Applicants' claim 1 (or any of the other independent claims). As such, claims 20, 43, 66, and 89, which depend from claims 1, 24, 47, and 70, respectfully, are patentable over '069 or '538 in view of Rearick et al.

In view of the above, Applicants respectfully request favorable reconsideration and allowance of all pending claims. The Commissioner is hereby authorized to charge any fee deficiency in connection with this Letter To Patent And Trademark Office to Deposit Account Number 19-1345 in the name of Senniger Powers.

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Respectfully Submitted,



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